

Haidersity of Georgia Research Joundation, Inc. (HGARI) and
Ilorida Agricultural Experiment Station (LAES)

MUSICAS, THERE HAS BEEN PRESENTED TO THE

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE INTLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANTION INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT. CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN UCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY THEORY AND THE SEQUENCE OF THE PLANT VARIETY THEORY.

WHEAT, COMMON

'AGS 2485'

In Cestimony Thereof, I have hereunto set my hand and caused the seal of the Hant Taxiety Arotection Office to be affixed at the City of Washington, D.C. this sixteenth day of September, in the year two thousand three.

Attest

Commissioner Plant Varioty Protection Office Agricultural Marketing Service Sure. Culture

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

### APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burder at the state of the

(Instructions and information	collection burden statement on rever	rse)				
1. NAME OF OWNER Universi Inc. (UGARF) and F Stations (FAES)	undation, iment	2. TEMPORARY DESIGNATE EXPERIMENTAL NAME	FION OR	3. VARIETY NAME AGS 2485 AGS485		
4. ADDRESS (Street and No., or R.F.D. No.,	City, State, and ZIP Code, and Country)		5. TELEPHONE (include are	a code)	FOR OFFICIAL USE ONLY	
Boyd Graduate Studies Research Center, 6th Fl D.W. Brooks Drive Athens, GA 30602-7411				706-542-5944 6. FAX (include area code)		2003000
				706-542-3837	-	FILING DATE
7. IF THE OWNER NAMED IS NOT A "PERS ORGANIZATION (corporation, partnership,			TED, GIVE	9. DATE OF INCORPORATI	- 14	October 9, 2002
Corporation (UGARF)			(UGARF)	November 17,	1978	<u> </u>
University of Geor and Florida Agric c/o John Ingle	RESENTATIVE(S) TO SERVE IN THIS APPLIC gia Research Foundati ultural Experiment St ies Research Center, 7411	ion, I tation	nc. is	ceive all papers)		FILING AND EXAMINATION FEES:  \$ 2705.00  DATE 10/9/2002  CERTIFICATION FEE:  \$ 435  DATE 3/25/3
11. TELEPHONE (Include area code)	12. FAX (Include area code)	13. E-M	AIL		14. CROP	KIND (Common Name)
706-542-5944	706-542-3837	km	mb@ovpr.uga.edu Wheat, commor			at. common
15. GENUS AND SPECIES NAME OF CROP		16. FAM	MILY NAME (Botanica	a/)		E VARIETY A FIRST GENERATION D?
Triticum aestivum		Gr	amineae		l _	D? ☑ YES     NO
18. CHECK APPROPRIATE BOX FOR EACH reverse)  a. X Exhibit A. Origin and Breeding I b. X Exhibit B. Statement of Distinct c. X Exhibit C. Objective Description d. X Exhibit D. Additional Description e. X Exhibit E. Statement of the Bas f. X Voucher Sample (2,500 viable u verification that tissue culture win repository)  g. X Filing and Examination Fee (\$2, States* (Mail to the Plant Variety)		20. DOES THE O'VARIETY BE I' IF YES, WHICH YARIETY BE I' IF YES, SPEC NUMBER 1,2,	ES (If "yes", answer items 20 and 21 below)  WNER SPECIFY THAT SEED LIMITED AS TO NUMBER OF 6 CH CLASSES? FOUND  WNER SPECIFY THAT SEED LIMITED AS TO NUMBER OF 6 CH CLASSES FOUNDATION TO SEED AS TO NUMBER OF 6 CH CLASSES FOUNDATION THE FOUNDATION FOUNDATION THE SEED AS TO NUMBER OF 6 CH CLASSES FOUNDATION THE FOUNDATION FOUNDATI	OF THIS CLASSES? ATION CONTRACTOR	REGISTERED CERTIFIED	
22. HAS THE VARIETY (INCLUDING ANY HAI FROM THIS VARIETY BEEN SOLD, DISPONDED THE COUNTRIES?  YES  JEYES, YOU MUST PROVIDE THE DATE FOR EACH COUNTRY AND THE CIRCUM		☐ Y	TY OR ANY COMPONENT OF IGHT (PLANT BREEDER'S RIC ES SE GIVE COUNTRY, DATE OF NUMBER. (Please use space in	FILING OR IS	TY PROTECTED BY INTELLECTUAL ENT)?  I NO SSUANCE AND ASSIGNED	
The owners declare that a viable sample of for a tuber propagated variety a tissue cultu.  The undersigned owner(s) is(are) the owner and is entitled to protection under the provise.		ipplication ar naintained for d plant variet n Act.	nd will be replenished r the duration of the c y, and believe(s) that	upon request in accordance wi	th such regul	ations as may be applicable, or
SIGNATURE OF OWNER STATES	Partol		SIGNATURE OF O	WNER		
NAME (Please print or type)  Gordhan L. Patel	-,		NAME (Please print	t or type)		
capacity or title Executive Vice Pres		2_	CAPACITY OR TITI			DATE
T-470 (07-01) designed by the Plant Variety Pro	tection Office with WordPerfect 9th Pooleoge 9	2TD 470 /04	01\uplich is absolute	(Can revenue ( · ·		f C

#### INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320) filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

#### **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

#### ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
  - (1) identify these varieties and state all differences objectively;
  - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale; disposition, transfer, or use for each country and the circumstam (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/isg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, ege, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and

TDD). USDA is an equal opportunity provider and employer.

S&T-470 (07-01) designed by the Plant Variety Protection Office with WordPerfect 9.0. Replaces STD-470 (04-01) which is obsolete.

Exhibit A

Origin and Breeding History of AGS 485 'AGS 2485

11/20/07

'AGS 485'(GA 92495E15) winter wheat (<u>Triticum aestivum L.</u>), was cooperatively developed and released by the Georgia and Florida Agricultural Experiment Stations in 2002. AGS 485 was derived from a single cross, GA831276/GA861278 ('Saluda'/FL74265)/('GA-Gore' / 'Florida 302'). The pedigree of Saluda (VA 79-54-254) is VA 71-54-147/Coker 68-15; the pedigree of GA-Gore (GA 79118) is Coker 797/Stacy; and the pedigree of FL 302 is Coker 65-20//Purdue 4946A4-18-2-10-1/Hadden/3/Vogel 5/ Anderson//Purdue 4946A4-18-2-10-1/Hadden. FL 74265 is an experimental line with the pedigree (Predgornaia 2 /3/Blueboy II/Coker 68-8//Fulbarn) and has good leaf rust resistance.

The cross of AGS 485 was made in the fall of 1991. The F1 was grown in the during the fall of 1992. The population was advanced from the F2 through F5 generations using the pedigree method of breeding with individual spikes selected for resistance to leaf rust (caused by Puccinia recondita (Roberge ex Desmaz), powdery mildew (caused by Erysiphe graminis DC. f. sp. tritici Em. Marchal), and septoria nodorum blotch (caused by Stagonospora nodorum (Berk) Castellani & E.G. Germano). Spikes were harvested, threshed individually and planted in single 1 meter headrows and were advanced to the next generation during the F2:3-, F3:4-, and F4:5-derived lines at Plains, GA. AGS 485 is the F5:derived head row selected and advanced to Breeder seed which was produced in 2002 in the F10 generation.

AGS 485 was evaluated as GA92485E15 for agronomic performance in nursery plots in 1998, GA-FL state trials at five locations from 1999 to 2001, and in the Uniform Southern Soft Red Winter Wheat Nursery at 25 locations in 2001 and 2002.

A increase strip of AGS 485 was planted in 2001 from a small increase plot and was rogued thoroughly for aberrant types. Seeds from this increase strip was planted in a increase block (2 acres) of AGS 485 was planted in 2002 at the Foundation Seed Farm and rogued to remove variants. AGS 485 has been observed for 3 generations of reproduction and during seed increase period and is stable and uniform. The variant consists of 2/10,000 early-awned types and 2/10,000 of taller types.

This Breeder seed of AGS 485 was provided to the Georgia Seed Development Commission and will be the source of future seed multiplications. Breeder seed of AGS485 will be maintained by the Georgia Agricultural Experiment Station, University of Georgia, Georgia Station, Griffin, GA 30223-1797.

#### Exhibit B

### Novelty Statement

AGS 2485 is a soft red winter wheat, awned, and white chaffed. AGS 2485 is most similar in appearance to 'Florida 302'. AGS 2485 does not have the occasional inverted florets and supernumerary spikelets while Florida 302 has inverted florets and supernumerary spikelets (as described in the PVP of Florida 302).

#### U.S. DEPARTMENT OF AGRICULTURE

#### AGRICULTURAL MARKETING SERVICE SCIENCE DIVISION BELTSVILLE, MARYLAND 20705

### OBJECTIVE DESCRIPTION OF VARIETY WHEAT (Triticum spp.)

***************************************		"TESTER (ETTERCULE SPP.)	
NAME OF APPLE	allu	Florida Agricultural	FOR OFFICAL USE ONLY
	eorgia Research Foundation, Inc. Exp No. or R.F.D. No, City, state, and Zip Code)	eriment Stations (FAES)	PVPO NUMBER
Boyd Graduate University of Ge Athens, GA 306	Studies Bldg. eorgia		VARIETY NAME —AGS 485 'AGS 2485
			TEMPORARY OR EXPERIMENTAL DESIGNATION Z A A
DE ELGE DEAN			
in the boxes belov quantitutive plan	w. Place a zero in the first box (e.g. or t characters should be based on a minimum	te the appropriate number that describes the varietal of the property of 100 plants. Comparative data should be determine the color standard may be used to determine plant colors.	ctively. Data for d from varieties entered
	questions for your variety; lack of response	may delay progress of your application.	
1 KIND:	1 = Common 2 = Durum	3 = Club 4 = Other (SPECIFY)	
2. VERNALIZA	TION:		
2	1 = Spring 2 = Winter	3 = Other (SPECIFY)	·
3. COLEOPTIL	E ANTHOCYANIN:		
1	I = Absent 2 = Present		
4. JUVENILE P	LANT GROWTH:		
2	1 = Prostrate 2 = Semi-erect	3 = Erect	
5. PLANT COL			· · · · · · · · · · · · · · · · · · ·
2	I = Yellow - Green 2 = Green	3 = Blue - Green	
6. FLAG LEAF	(boot stage):	· · · · · · · · · · · · · · · · · · ·	
1	1 = Erect 2 = Recurved	1 Not Twiste	d 2 = Twisted
7. EAR EMERG			
0 1	Number of Days Earlier Than	AGS 2000	
	Number of Days La	Coker 9835	There are a second and a second a second and
8. ANTHER CO	LOR: 1 = YELLOW 2 = PURPLE		
9. PLANT HEIG	HT (from soil to top of head, excluding a	wns):	<u> </u>
0 8	cm Taller Than	Coker 9835	
0 1	cm Shorter Than	AGS 2000	

10. STE	M:					
		. ANTHO	CYANIN	1	•	
		1	1 = Absent	2 = Present		
	R	. WAXY I	BLOOM		•	
	J		1 = Absent	2 = Present		
	_					
	C		ESS (last internode o 1 = Absent	f rachis) 2 = Present		
			1 - Absolit	z – Fiesent	· ·	
•	D	INTERN	ODE (SPECIFY NUM	MBER)		
S		1	1 = Hollow	2 = Semi-solid	3 = Solid	
	E.	PEDUN	CLE			
			1 = Absent	2 = Present		
		21	cm Length			
11. HEA		t Maturity)				
	.А.	DENSIT		n – Baidalanaa		
		2	1 = Lax	2 = Middense	3 = Dense	
	В.	SHAPE				
		4	1 = Tapering	2 = Strap	3 = Clavate 4 = Other (SP	ECIFY) oblong
**************************************						
	C.	CURVA:			•	
		1	1 = Erect	2 = Inclined	3 = Recurved	
	D.	AWNED	NESS			
	-	4 1	1 = Awnless	2 = Apically Awnletted	3 = Awnletted 4 = Awned	
12. GLU	MES	(at Matur	itv)			
				· · · · · · · · · · · · · · · · · · ·		
	Α.	COLOR				
	A.		I = White	2 = Tan	3 = Other (SPECIFY)	
		1 1		2 = Tan	3 = Other (SPECIFY)	
		SHOULD	DER			i = Fleyated 6 = Aniculate
		1 1 SHOULD		2 = Tan 2 = Oblique	3 = Other (SPECIFY)  3 = Rounded 4 = Awned 5	5 = Elevated 6 = Apiculate
	В.	SHOULD	DER			5 = Elevated 6 = Apiculate
	В.	SHOULD 3 1 BEAK	DER			i = Elevated 6 = Apiculate
	B. C.	SHOULE 3 1 BEAK	DER I = Wanting I = Obtuse	2 = Oblique	3 = Rounded 4 = Awned 5	i = Elevated 6 = Apiculate
	B. C.	SHOULE 3 1 BEAK 2 1 LENGTH	DER I = Wanting I = Obtuse	2 = Oblique	3 = Rounded 4 = Awned 5 3 = Acuminate	i = Elevated 6 = Apiculate
	B. C.	SHOULD SHOULD BEAK 2 1 LENGTH 3 1	DER I = Wanting I = Obtuse	2 = Oblique 2 = Acute	3 = Rounded 4 = Awned 5 3 = Acuminate	5 = Elevated 6 = Apiculate
	B. C.	SHOULD  SHOULD  BEAK  2 1  LENGTH  WIDTH	DER I = Wanting I = Obtuse I = Short (ca. 7mm)	2 = Oblique 2 = Acute	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm)	5 = Elevated 6 = Apiculate
	B. C. D.	SHOULD SHOULD BEAK 2 1 LENGTH 3 1 WIDTH	DER I = Wanting I = Obtuse I = Short (ca. 7mm)	2 = Oblique 2 = Acute 2 = Medium (ca. 8mm)	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm)	i = Elevated 6 = Apiculate
13. SEE(	B. C. D.	SHOULD  SHOULD  BEAK  2 1  LENGTH  WIDTH  3 1	DER I = Wanting I = Obtuse I = Short (ca. 7mm)	2 = Oblique 2 = Acute 2 = Medium (ca. 8mm)	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm)	i = Elevated 6 = Apiculate
	B. C. D.	SHOULD SHOULD SHOULD BEAK 2 1 LENGTH 3 1 WIDTH 3 1 SHAPE	DER I = Wanting I = Obtuse I = Short (ca. 7mm)	2 = Oblique 2 = Acute 2 = Medium (ca. 8mm)	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm)	i = Elevated 6 = Apiculate
	B. C. D. E.	1 1 SHOULD 3 1 LENGTH 3 1 WIDTH 3 1 SHAPE 1 1	DER I = Wanting I = Obtuse I = Short (ca. 7mm) = Narrow (ca. 3mm)	2 = Oblique 2 = Acute 2 = Medium (ca. 8mm) 2 = Medium (ca. 3.5mr	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm) n 3 = Wide (ca. 4mm)	i = Elevated 6 = Apiculate
	B. C. D. E.	SHOULD SHOULD SHOULD SHAPE T CHEEK	DER   = Wanting   = Obtuse   = Short (ca. 7mm)   = Narrow (ca. 3mm)   = Ovate	2 = Oblique 2 = Acute 2 = Medium (ca. 8mm) 2 = Medium (ca. 3.5mr	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm) n 3 = Wide (ca. 4mm)	i = Elevated 6 = Apiculate
	B. C. D. E.	SHOULD SHOULD SHOULD SHAPE T CHEEK	DER I = Wanting I = Obtuse I = Short (ca. 7mm) = Narrow (ca. 3mm)	2 = Oblique 2 = Acute 2 = Medium (ca. 8mm) 2 = Medium (ca. 3.5mr	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm) n 3 = Wide (ca. 4mm)	5 = Elevated 6 = Apiculate
	B. C. D. A. B.	1 1 1 SHOULD 3 1 LENGTH 3 1 WIDTH 3 1 CHEEK 1 1	DER   = Wanting   = Obtuse   = Short (ca. 7mm)   = Narrow (ca. 3mm)   = Ovate	2 = Oblique 2 = Acute 2 = Medium (ca. 8mm) 2 = Medium (ca. 3.5mr	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm) n 3 = Wide (ca. 4mm)	5 = Elevated 6 = Apiculate
	B. C. D. A. B.	SHOULD SHOULD SHOULD SHAPE THE SHAPE	DER   = Wanting   = Obtuse   = Short (ca. 7mm)   = Narrow (ca. 3mm)   = Ovate   = Rounded	2 = Oblique 2 = Acute 2 = Medium (ca. 8mm) 2 = Medium (ca. 3.5mr	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm) n 3 = Wide (ca. 4mm) 3 = Elliptical	i = Elevated 6 = Apiculate  = Not Collared 2 = Collared
	B. C. D. A.	1 1 1 SHOULD 3 1 LENGTH 3 1 SHAPE 1 1 SHAPE 1 1 SRUSH 1 1	DER   = Wanting   = Obtuse   = Short (ca. 7mm)   = Narrow (ca. 3mm)   = Ovate   = Rounded   = Short	2 = Oblique  2 = Acute  2 = Medium (ca. 8mm)  2 = Medium (ca. 3.5mr)  2 = Oval  2 = Angular	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm) n 3 = Wide (ca. 4mm) 3 = Elliptical	
	B. C. D. A.	SHOULD SHOULD SHOULD BEAK  LENGTH  SHAPE  CHEEK  BRUSH  CREASE	DER   = Wanting   = Obtuse   = Short (ca. 7mm)   = Narrow (ca. 3mm)   = Ovate   = Rounded   = Short	2 = Oblique  2 = Acute  2 = Medium (ca. 8mm)  2 = Medium (ca. 3.5mr)  2 = Oval  2 = Angular  2 = Medium	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm) n 3 = Wide (ca. 4mm) 3 = Elliptical	= Not Collared 2 = Collared
	B. C. D. A.	SHOULD  SHOULD  SHOULD  BEAK  2 1  LENGTH  3 1  WIDTH  3 1  CHEEK  1 1  BRUSH  1 1  CREASE  1 1	DER   = Wanting   = Obtuse   = Short (ca. 7mm)   = Narrow (ca. 3mm)   = Ovate   = Rounded   = Short   = Width 60% or less	2 = Oblique  2 = Acute  2 = Medium (ca. 8mm)  2 = Medium (ca. 3.5mr)  2 = Oval  2 = Angular  2 = Medium	3 = Rounded 4 = Awned 5 3 = Acuminate 3 = Long (ca. 9mm) n 3 = Wide (ca. 4mm) 3 = Elliptical 1 1	= Not Collared 2 = Collared = Depth 20% or less of Kernel
	B. C. D. A.	SHOULD  SHOULD  SHOULD  BEAK  2 1  LENGTH  3 1  WIDTH  3 1  CHEEK  1 1  BRUSH  1 1  CREASE  1 1  1	DER   = Wanting   = Obtuse   = Short (ca. 7mm)   = Narrow (ca. 3mm)   = Ovate   = Rounded   = Short	2 = Oblique  2 = Acute  2 = Medium (ca. 8mm)  2 = Medium (ca. 3.5mr)  2 = Oval  2 = Angular  2 = Medium  of Kernel of Kernel	3 = Rounded 4 = Awned 5  3 = Acuminate  3 = Long (ca. 9mm)  3 = Wide (ca. 4mm)  3 = Elliptical  1 1	= Not Collared 2 = Collared

per letter of 2/4/03 mad 3/11/2003

13. S	EED: (continued)				<del> </del>
	E. COLOR	•		•	
	3 1 = White	2 = Amber	3 = Red	4 = Other (SPECIFY)	
*.	F. TEXTURE	•			
	1 = Absent	2 = Present			
	G. PHENOL REACTION (see	Instructions):			
	2 1 = Ivory	2 = Fawn	3 = Light B	ro 4 = Dark Bro 5 = Black	
14. D	SEASE: (0 = Not Tested; 1 -	Susceptible: 2 - Res	istant: 3 - Inte	rmediate: 4 - Tolerant)	
	PLEASE INDICATE	THE SPECIFIC RACE	OR STRAIN T	ESTED	
	Stem Rust (Puccinia gramini	is f. sp. <i>tritici</i> )	Leaf Rust (	Puccinia recondita f. sp. tritici	n
	[3]	•	[2]	CBGJ, CDBD, LBBR, CLLR, I	
	Field	<u>.</u>		MBRK, TLGF, <del>TLGG</del> TLGS	
	Stripe Rust ( Puccinia striifo	rmis)	Loose Smu	t ( Ustilago tritici)	
	Field		0	•	
	Field Tan Spot (Pyrenophora tritic	i ronontio)			
	o o o o o o o o o o o o o o o o o o o	i-repenus j	Plag Smut (	Urocystis agropyri)	
	Halo Spot (Selenophoma do	_ nacis)	Common B	unt (Tilletia tritici or T. laevis)	
	0	·	0	(	
*.	· LJ		ш	<u> </u>	
1	Septoria nodorum (Glume B	lotch)	Dwarf Bunt	(Tilletia controversa)	
100	3		0	-	
	Senteria sugnes (Smeakled I			- CT**11 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Septoria avenae (Speckled L	eat Disease)	Rarnal Bun	t (Tilletia Indica)	
	Septoria tritici (Speckled Lea	af Blotch)	Powdery Mi	ildew (Erysiphegraminis f. sp.	tritici)
	1		1		
	. <u> </u>	_	· 🗀 .	ASO, Pm4, Yuma	
	Scab (Fusarium spp.)	•	"Snow Mole	is"	
	1		0	•	
	"Black Point" (Kernel Smudg		Common B	oot Rot (Fusarium, Cochliobo	lua and Disslavia ann \
	o the treme official	A <u>c</u> 1		oot Rot (Fusarium, Cocimopo	ius anu bipolaris spp.;
			الْ		
	Barley Yellow Dwarf Virus (B	ŸDV)	Rhizoctonia	Root Rot (Rhizoctonia solani	<b>)</b> .
	[3]		0	•	• • • • • • • • • • • • • • • • • • •
	. L	· —	. 🗀		
	Soilborne Mosaic Virus (SBM	IV)	Black Chaff	(Xanthomonas campestris py	r. translucens)
	1		0		
	Wheat Yellow (Spindle Streat			- <del></del>	
	writeat Tellow (Spingle Stream	() Wosaic Virus	Bacteriai Le	af Blight (Pseudomonas syrin	igae pv. syringae)
	· [']	•	["		
	Wheat Streak Mosaic Virus (V	VSMV)	Other (SPE	CIFY	
	(	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		·,	A CONTRACTOR OF THE SECOND
•	Other (SPECIFY)	_	Other (SPE	CIFY)	1 mil 1
	L	·			,
	Other (SPECIFY)		Other (SPE	CIFY)	ent syl
*.		•			
	Other (SPECIFY)		Other (SPE	SIEVI	
		•	Ouler (SPEC	∠!Γ <i>! )</i>	
			***	•	

Hessian Fly (Mayetiola destructor)	Other (SPECIFY)
B, C, D, L	
Stem Sawfly ( Cephus spp.)	Other (SPECIFY)
Cereal Leaf Beetle (Oulema melanopa)	Other (SPECIFY)
Russian Aphid ( <i>Diuraphis noxia</i> )	Other (SPECIFY)
Greenbug (Schizaphis graminum)	Other (SPECIFY)
Aphids	Other (SPECIFY)

Exhibit D

Additional Description of AGS 485

'A65 2485

MAH 11/20/2002

AGS 485 is a common soft red winter wheat, *Triticum aestivum* L. bred and developed by the University of Georgia, Georgia Agricultural Experiment Stations and developed jointly by Jerry W. Johnson and Ron D. Barnett with the University of Florida, Florida Agricultural Experimental Station.

AGS 485 is a medium maturing, high yielding, excellent test weight, awned wheat with resistance to current races of leaf rust, <u>Puccinia recondita</u> (Roberge ex Desmaz) and susceptible to predominant biotypes (biotype B, C, D, L) of Hessian flies, (<u>Mayetiola destructor</u> (Say), and moderately susceptible to powdery mildew, (<u>Erysiphe graminis</u> DC. f. sp. <u>tritici</u> Em. Marchal) in Georgia. AGS 485 is resistant to leaf rust races, CBGJ, CDBD, LBBR, CLLR, FBRP, MBRK TLGF, and TLGJ and susceptible to SCJF. It also possesses the 1BL/1RS translocation.

Milling and baking quality characteristics of AGS 485 are rated as acceptable for soft red winter wheat use by the USDA-Soft Wheat Quality Laboratory, Wooster, OH. Information on the milling and baking quality characteristics is also included in a quality report. Additional information is presented in attachment to the Exhibit.

#### ATTACHMENT I

APPLICATION FOR APPROVAL OF X CULTIVARS \_\_\_\_ ASSOCIATE CULTIVARS (Please check appropriate type of application)

1. Crop: Wheat

2. Experimental no. or name: 92485E15 'AGS 2485'

MAH 11/20/2002

- 3. Pedigree and history: GA831276/GA861278 (Saluda/FL74265)/(Gore/FL302). The final cross was made in the fall of 1992. Individual spike selections were made in the F2 to F5 generations at Griffin, GA. The pedigree method of breeding was used to advance the segregating populations. In 1997, a headrow was harvested for preliminary evaluations. Agronomic evaluations were conducted from 1999 to 2001 in the Small Grain State Performance trials for Georgia. It was evaluated in 2001 in the Uniform Southern Wheat Nursery.
- 4. Description: 92485E15 is a medium maturing, white chaffed, medium height line with good straw strength. It matures on average 1 day earlier than AGS 2000 in Georgia. It is moderately resistant to currently predominant races of leaf rust, and moderately susceptible to susceptible to powdery mildew and biotypes of Hessian fly in Georgia.
- 5. Station(s) where developed: Griffin Campus
- 6. Participating scientist(s): Jerry Johnson, Barry Cunfer, G. David Buntin, and Dan Bland
- 7. In what respect is the new cultivar superior to the cultivar now in use? or reasons for proposing release as an associate cultivar.

92485E15 was approved by the Small Grain Commodity Committee for release. It is a high-yielding (Tables 1,4, 7,9), medium maturing and high test weight (Tables 2,5,8) cultivar. 92485E15 yielded equal to or better than checks in South, North and State wide Georgia in 1999 (Table 1), In 2000, 92485E15 yielded equal to the checks in North Georgia but less in South and Statewide (Table 4). In 2001, 92485E15 yielded equal to the checks in South, North, and Statewide Georgia (Table 7). In Table 9, 2-yr and 3-yr averages revealed that 92485E15 was equal to AGS 2000 and PIO 26R61 (two of the leading wheat cultivars presently grown in Georgia) for 2-Yr in North and Statewide and 3-Yr for South, North and Statewide Georgia.

In regional trials, 92485E15 performed equal to or better than the currently grown check cultivars (Coker 9835, AGS 2000, or Coker 9663) for grain yield at all locations (16 locations) and within region locations in the Southeast in

2001 (Table 10). It ranked  $2^{\rm th}$  out of 40 entries in 2001. AGS 2000, PIO 26R61, and USG 3209 are presently the highest yielding, medium-maturing wheat cultivar grown in the southeastern region.

92485E15 was equal to or higher for test weight than the checks (Tables 2, 5, 8). In State trials, 92485E15 was moderately resistant to both leaf rust, powdery mildew, and Hessian fly (Table 3, 6).

- 8. Method of propagation: Seed
- 9. Amount of breeder seed stocks available (if applicable): 70 bu.
- 10. Amount of foundation seed stocks available (if applicable): 2000 bushel in summer of 2002.
- 11. Amount of cutting or bud material available for vegetatively propagated material for nursery distribution (if applicable):
- 12. Is there likely to be unusual difficulty encountered in the production of any class of seed stocks? Explain. No
- 13. Three suggested names for the cultivar: 92485E15
- 14. Name approved by plant cultivar and germplasm release committee:
- 15. Form of intellectual property protection: Plant Variety Protection
- 16. Is a royalty assessment recommended: X Yes \_\_\_\_ No

92	49	5	F1	ང
72	40	U	ᄃᅺ	IJ

	RECOMMENDED B	Υ:
	В.	
Originating Scientist	D.	Department Head
Assistant Dean		Chairperson, GAES Plant Cultivand Germplasm Release Committee
Associate Dean for Research	•	
APPROVED:		
	Dean and	

'A65 7485'

Table 1. Average yield performance of 92485E15 and check cultivars in State Performance Trials at five locations in 1999.

	Location								
Entry	Tifton	Plains	Midville	South	Griffin	Calhoun	North	Average	
92485E15	57.0	59.7	67.0	61.2b	106.0	45.3	75.6a	67.0b	
AGS 2000	55.6	66.8	55.6	59.3a	98.3	48.1	73.2a	64.8b	
PI026R61	53.7	66.3	54.2	58.1c	101.3	49.2	75.2a	64.9b	
USG3209	60.9	70.8	67.9	66.5a	105.1	57.4	81.2	72.4a	

Table 2. Performance of 92485E15 and check cultivars in State Performance Trials for 1999.

	Test Wt.	Lodging	Date	Height
Entry	1bs/bu	%	Headed	in
92485E15	60.8a	2	4/5	40
ASG 2000	58.8b	6	4/6	39
PI026R61	60.2a	3	4/7	40
USG 3209	58.3b	1	4/7	35

Table 3. Average performance of 92485E15 and check cultivars in State Performance Trials for 1999.

				•
Entry	Powdery Mildew	Leaf Rust %	Hessian Fly %	
92485E15	R	0	0.0a	
AGS 2000	R	0	4.4a	
PIO 26R61	R	0	2.2a	enter Nager State State
USG 3209	R	0	33.3b	
		•	,	

AGS 2485'
Table 4. Average yield performance of <del>92485E15</del> and check cultivars in State Performance Trials at five locations in 2000.

Location								
Entry	Tifton	Plains	Midville	South	Griffin	Ca1houn	North	Average
92485E15	70.2	70.4	39.3	59.9b	92.2	58.4	75.3a	66.1b
AGS 2000	74.6	83.8	54.7	<b>81.0</b> a	95.9	66.0	81.0a	75.0a
PI026R61	73.1	83.5	55.2	82.5a	101.5	63.4	82.5a	75.3a

Table 5. Performance of 92485E15 and check cultivars in State Performance Trials for 2000.

				· · · · · · · · · · · · · · · · · · ·		
Entry	Test Wt. Lodging 1bs/bu %		Date Headed	Height in		
92485E15	61.0a	4	4/1	41		
ASG 2000	60.1b	7	4/1	41		
PI026R61	60.5ab	3	4/3	43		
		•	•	•		

Table 6. Average performance of 92485E15 and check cultivars in State Performance Trials for 2000.

Entry	Leaf Rust	Hess Flv	ian . %	· · · · · · · · · · · · · · · · · · ·	- 13 - 13
	%	Plains	Griffin		1) 1)
92485E15	15	12.2a	21.2b		(2)
AGS 2000	1	10.4a	11.1a	•	
PIO 26R61	0	0.0a	0.0a		
USG 3209	0	40.0b	26.7b		

'AሬS ረዛዬሬ' Table 7. Average yield performance of <del>92485E15</del> and check cultivars in State Performance Trials at five locations in 2001.

			Lo	cation				
Entry	Tifton	Plains	Midville	South	Griffin	Calhoun	North A	lverage
92485E15	87.0	81.5	72.6	80.4bc	120.6	49.4	85.0a	82.2a
AGS 2000	94.5	85.0	67.7	82.4ab	104.4	49.0	76.7a	80.1a
PI026R61	82.1	95.5	67.1	81.5ab	109.1	46.0	77.6a	79.9a
USG3209	87.9	93.7	74.5	85.3a	110.7	49.9	80.3a	83.3a

Table 8. Performance of 92485E15 and check cultivars in State Performance Trials for 2001.

Entry	Test Wt. 1bs/bu	Lodging %	Date Headed	Height in
92485E15	58.2b	16	4/4	40
ASG 2000	58.5b	11	4/5	39
PI026R61	59.1a	4	4/7	40
USG 3209	57.0c	18	4/7	35
			•	

'AGS 2485'
Table 9. Average Yield Performance of 92485E15 and check cultivars in State Performance Trials for 2-Yr and 3-Yr Average (1999-2000.

	So	uth	No	rth	State	wide .
Entry	2-Yr	3-Yr	2-Yr	3-Yr	2-Yr	3-Yr
92485E15	70.1b	67.2a	80.2a	78.6a	74.1a	71.8a
AGS 2000	76.7a	70.9a	78.8a	76.9a	77.5a	73.3a
PIO 26R61	76.1a	70.1a	80.0a	78.4a	77.6a	73.4a

Table 10. Average performance of 92485E15 and check cultivars in the Uniform Southern Soft Red Winter Wheat Nursery (16 Locations)+, 2001.

_		<u>, bu/a</u>	Test Wt	Date	Height	
Entry	A11	Region	Lbs/Bu	Headed	inches	•
92485E15	74	76	58.8	114	33	
AGS 2000	74	75	58.1	114	36	
C 9835	68	68	56.3	116	32	
C 9633	69	69	57.7	116	36	

<sup>+</sup> States and (Number of Locations) tested: Arkansas (3), Florida (2), Georgia (2), Kansas (1), Kentucky (1), Louisiana (1), Maryland (1), Mississippi (1), Tennessee (1), Texas (2), Virginia (1).

#### **LEAF RUST**

St. Paul MN

Reactions produced by NA race\*

	CBGJ CDBD	LBBR CLLR	FDDD 4400				Postulated
1 Coker 9835	0000	· LUDIN CLLR	FBRP MBR		TLGJ	SCJF	Genes***
2 Coker 9663			i.	. 3	3	;	2a,9,11,
3 Mason				:	3	;	9,10,11
4 AGS2000	;1cn			3 .	3	:	9,11,+
5 S9412192			; ;1c	;	;	;	. +
6 LA90518PB43-3-1-4	;1c ;1c		#1 132 B	;-3	•	. :	+
7 LA90185G3-1-4-2	1 No. 10 at 1		; 1c		;1c	;1c	+
8 VA98W-593	1 (14 (14 (14 (14 (14 (14 (14 (14 (14 (1		838 - Landon Jan 1940		. 3	. :	9,10,+
9 NC96-13155		; ;1c			1	;	+
10 NC96-13965	ed the second section			•	2c;	;1c	+
11 B950943		in the same			2c,	;1c	+
12 TX96D1320				•	;1c2	;	+
13 TX97D6737		; 3-;	ya asiye 🗼 🧎	;	3	;	9,10,+
14 TX91-57	;2c ;1c	; ;1c	;	,	3	;	9,10,+
15 AR839-27-13	;2c :1c		2c; 3	;1c	2c,	;2c	10,11,18
16 AR839-25-8-2	1.11 14 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10	;1c,;;,;	. <b> </b>	3;	3	3-:	1,3,10,11,+
17 AR-LA85411		er de espera	. 3	;1c	3-;	3-;	1,3,10,11,+
18 LA9397D5-3-3	;1cn ;1c		;1c ;1c		;1c	;1c	+
19 TX98D2106		5 - 1 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2		3-;	. 3	3	2a,11,+
20 GF90524E1				3	3	;-3	2a,11,+
-21 OF92485E15	Auffer Laguert, K	ing a second second		•	3	;1	9,10,11
22 GF921221E16	·20			· · · · · · · · · · · · · · · · · · ·	::	3;	· +
23 NC96-13156	;2c	3; 3	;-3; 3	3;	2c2;	2c3;	3,18,+
24 AW-D97-6075	36°s				.3	•	9,10,11
25 AW-D97*6940			3-3;	3,	3-;	23;	11,+
26 AW-D97*6961	- 11 - 14 - 1	;1c	;1c	î	2c;	:1c	+
27 AW-D97-6740	;1c ;1c 3 3		: :	-		;2c	+
28 VA98W-591		; ;1c-3	; 3 3 <sub>,</sub>	3	3	3	3
29 VA99W-200	; 3-2c; 3-; 3;	en ing naga		ï	;	•	<b>+</b> ,
30 VA99W-169		;2c	;2c ;2	;1	3;	3	+
31 TX97-167		;2c ;2c2	;2c2 3	;3	. 3	3	11,+
32 SC952746	: 3 ;1c2 ;1cn ;	; ;1c	;1c3 3	:3	3-;	3	11,+
33 SC960057	the contract of the contract o	The second of the	;	i	ţ	1	+
34 B960208	3; ;2		;1c 3;2	;3	31c;	3	11,+
35 B960457		; ;-3		3;	3	,	9.+
36 B961378		,		;		3	2a,11,18,±
37 G09088	3 4-0			3-;	3		9,10,11
38 G09091	3 ;1c2	;1	3: 3	i	3 ု	3(-2)	10,11
39 G09080	;1c-3 3-1c 3 3	3 3-	3-: 3	3	3	3 3	0
40 G09138		3 3	3 3	3	3	3	0
41 F/G921188E43	2c;	3 ;2c2	;1c 3	;	3	i	1,10,18
42 MDV71-19	:10		1	**************************************	i	;	+
43 MDV26-30	;1c ;	;	;	;	*	,1c	+
-10 MID V20-00			;	;-3	•		+

<sup>\*</sup> Single genes tested = Lr1, 2a, 2c, 3, 3ka, 9, 10, 11,14a,16,17,18,24,26,30,B

CBGJ = 3,11,14a,18 CDBD = Lr 3,24,14a LBBR = 1,10,13,B CLLR = 3,3Ka,9,10,18,B FBRP = 2c,3,3ka,11,14a,18,B

MBRK = 1,3,3ka,10,11,14a,18,30 TLGF = 1,2a,2c,3,9,11,14a,18 TLGJ = 1,2a,2c,3,10,11,14a SCJF = 1,2a,2c,11,14a,17,18,26

<sup>\*\*</sup>Virulence Formula:

<sup>\*\*\* + =</sup> Lr gene(s) present but unable to identify with these Lr virulence combinations

### POWDERY MILDEW

Raleigh NC

		ABK	Aso	E2-15 E3-14	F7-11	F7-12	Mo10	Pm4	Yuma
		RM	RM	M RM	R	RM	RM	R.	M
	4 AGS2000	Kivi S	S	S S	S	S	s	S	S
	15 AR839-27-1-3	s S	S	SSS	S	S	s	S	S
	16 AR839-25-8-2	Control of the contro	R	R R	R	R	R	RM	R
	17 AR-LA85411	R	S	S S	s S	S	S	S	S
	18 LA9397D5-3-3	S		S S	S	S	S	Ś	S
	19 TX98D2106	M	S	R M	M	M	RS	. M	M
	20 GF90524E1	M M	M	S S	s	М	s	S	S
A65 2485	<del>21 GF92485E15</del>	M	S	S	s	s	s	S	S
1100 - 1-	22 GF921221E10	M 14	M	S S	R	RM	R	RS	R
mail _	23 NC96-13156	S	R	S S	S	S	S	S	. S
11/20/02	24 AW-D97-6075	M. #	S	S S	S	S	S	S	S
	25 AW-D97-6940	S	S		R	RM	M	M	R
ta, t	26 AW-D97-6961	M	RM		S	S	М	S	S
	27 AW-D97-6740	S	S	and the second second	M	M	M	S	M
	28 VA98W-591	<b>M</b>	M		S	S	S	S	S
. The second second	Chancellor	S	. S		M	S:	Š	S	R
	29 VA99W-200	R	R	The state of the s	S	M	S	· s	М
	30 VA99W-169	RM	R		S	S	S	S	. S
	31 TX97-167	S	S		S	. R	M	RM	S
	32 SC952746	M	RM	M S S S	S	S	s	S	s ·
	33 SC960057	S	S		S	S	S	- S	- S
	34 B960208	S	S	S S	S	S	S	S	RS
	35 B960457	S	S	S	S	S	S	S	S
	36 B961378	S	S	S S	S	S	S	S	S
	37 G09088	S	S	S S	S	S	S	Š	S
	38 G09091	* S	S	S S	S	S	S	S	S
	39 G09080	S	S	s s	S S	, .S S	S	s s	S
	40 G09138	S	, S	S S	RM	- S	. M.	RM	R
	41 F/G921188E43	RM	M	s s		RS	M	1	R
	42 MDV71-19	, R	S	S R	R	RS	R	s S	S
	43 MCV26-30	S	SR	RS	RS	S	S	S	S
**	Chancellor	S	S	S S	., S.,	<b>S</b> .	3		ŕ
				·	•				

### HESSIAN FLY

W. Lafayette IN

		•	•	ΪΝ			
			Biotype	Biotype	Biotype	Biotype	Biotype
* :			В	c	Ď	E	L
	1	Coker 9835	0 - 15		0 - 13	15 - 1	0 - 11
	2	Coker 9663	2 - 11	2 - 10	6 - 5	6 <b>-</b> 10	0 - 12
	3	Mason	0 - 15	0 - 17	0 - 13	1 -11	0 - 11
	4	AGS2000	0 - 13	0 - 13	0 - 12	0 - 12	0 - 10
	- 5	S9412192	0 - 14	0 - 19	0 - 12	0 - 12	0 - 14
	6	LA90518PB43-3-1-4	0 - 15	0 - 16	0 - 12	1 - 14	0 - 13
<i>1</i>		LA90185G3-1-3-4-2	* ***	10 - 5	0 - 14	12 - 1	0 - 12
	. 8	VA98W-593	0 - 14	0 - 15	0 - 15	0 - 11	0 - 10
	9.		0 - 21	0 - 10	0 - 10	. 1 - 13	0 - 10
	10		0 - 14	4 - 13	0 - 12	3 - 11	0 - 9
		B950943	0 - 14	0 - 14	0 - 15	0 - 14	0 - 12
		TX96D1320	11 - 1	11 - 5	0 - 14	19 - 0	0 - 10
		TX97D6737	0 - 14	0 - 11	** ** **	0 - 14	0 - 15
Na in the		TX91-57	8 - 5	6 - 7	8 - 4	7 - 7	10 - 3
		AR839-27-1-3	0 - 14	3 - 12	0 - 17	1 - 14	0 - 14
		AR839-25-8-2	0 - 15	0 - 14	0 - 15	0 - 19	0 - 14
<u> </u>	1.22%	AR-LA85411	0 - 14	<b>0 - 15</b>		18 - 0	0 - 14
		LA9397D5-3-3	0 - 13	0 - 20	0 - 18	0 - 14	0 - 16
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TX98D2106	15 - 0		0 - 15	13 - 3	0 - 12
. 446 31/0/	20		0 - 17		0 - 15	2 - 13	0 - 11
· A65 2485		- GF92485E15	0 - 15	A 10 CO 10 C	0 - 12	8 - 9	0 - 11
MAH.		GF921221E16	0 - 15	15 - 0	10 - 1	6 - 8	1 - 8
11/20/02		NC96-13156	0 - 13	*** * * * * * * * * * * * * * * * * * *	<b>0 - 11</b>	8 - 8	3 - 11
		AW-D97-6075	0 - 13	0 - 14	0 - 15	0 - 17	0 - 16
		AW-D97*6940	0 - 10	0-9	<u> </u>	0 - 17	0 - 9
	4	AW-D97*6961	12 - 1	0 - 15	0 - 13	17 - 0	4 - 11
		AW-D97-6740 VA98W-591	0 - 12	7 - 5	0 - 11	0 - 17	0 - 15
		VA99W-200	0 - 16	0 - 13	0 - 13	1 - 15	2 - 11
		VA99W-169	6 - 9	1 - 19	0 - 15	8 - 10	9 - 5
		TX97-167	0 - 18	0 - 18	0 - 12	16 - 2	3 - 11
1	32	SC952746	0 - 12	6 - 12	0 - 14	9 - 8	0 - 16
		SC960057	0 - 8	2 - 6	0 - 7	0 - 5	0 - 11
	34	B960208	12 - 0	5 - 12 12 0	0 - 12	13 - 0	0 - 19
	35	B960457	14 - 0	12 - 0	4 + 8	21 - 0	13 - 1
	36	B961378	15 - 1	and the second s	0 - 13	19 - 0	2 - 11
		G09088	12 - 1 12 - 0	0 - 12	0 - 14	15 - 3	0 - 11
		G09091	14 - 7	2 - 12 0 - 14	0 - 12	15 - 1	0 - 9
	A	G09080	. 1 <del>4 -</del> 7 - 12 <b>-</b> 2	0 - 14 0 - 18	0 - 17 0 - 16	17 - 3	0 - 13 0 - 10
		G09138	0 - 16	0 - 18 0 - 18		20 - 0	0 - 10
· ·		F/G921188E43	0 - 16	0 - 10	0 - 17 0 - 11	0 - 16 1 - 16	0 - 11
		MDV71-19	0 - 13	16 - 1	0 - 10		1 - 13
		MDV26-30	12 - 4	3 - 14	0 - 10 0 - 14	0 - 16	0 - 7 0 - 12
	70	1415 V 20 00	14	J = 1 <del>4</del> .	0 - 14	11 - 5	0 - 12

### 1RS STATUS

Lincolr
NE

	Non TRS
1 Coker 9835	Non.1RS
2 Coker 9663	Non 1RS
3 Mason	1BL.1RS
4 AGS2000	1BL.1RS
5 S9412192	Non.1RS
6 LA90518PB43-3-1-4	Non 1RS
7 LA90185G3-1-3-4-2	1AL.1RS
8 VA98W-593	Non 1RS
9 NC96-13155	Non.1RS
10 NC96-13965	Non 1RS
11 B950943	Non.1RS
12 TX96D1320	Non 1RS
13 TX97D6737	Non 1RS
14 TX91-57	Non 1RS
15 AR839-27-1-3	Non.1RS
16 AR839-25-8-2	Non IRS
17 AR-LA85411	Non.1RS
18 LA9397D5-3-3	Non 1RS
19 TX98D2106	Non.1RS
, 20 GF90524E1	1BL1RS
2 <del>1 OF92485E15</del>	Non.1RS
22 GF921221E16	Non 1RS
23 NC96-13156	Non.1RS
24 AW-D97-6075	Non 1RS
25 AW-D97*6940	1BL.1RS
26 AW-D97*6961	Non 1RS
27 AW-D97-6740	1AL.1RS
28 VA98W-591	Non TRS
29 VA99W-200	Non.1RS
30 VA99W-169	Non:1RS
31 TX97-167	Non.1RS
32 SC952746	Non.1RS
33 SC960057	Non.1RS
34 B960208	Non 1RS
35 B960457	Non.1RS
36 B961378	Non 1RS
37 G09088	Non.1RS
38 G09091	1AL 1RS
39 G09080	1BL.1RS
40 G09138	1BL 1RS
41 F/G921188E43	1BL.1RS
42 MDV71-19	

43 MDV26-30

1 A65 2485

11/20/2002

# 20030005 ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

STD = AVG. OF TWO MASON ENTRIES

	LAB ENTRY		MILLING			DAKING		
1	NO.	•	QUALITY			BAKING	•	
			SCORE			QUALITY		
			REGION 1	REGION 2	Admaai	SCORE		
	1 Color 0005			11201011 2	MEAN	REGION 1	REGION 2	MEAN
	1 Coker 9835 2 Coker 9663		105.5	102.6	104.0	97.8	95.7	96,7
	i i	•	95.7	91.9	93.8	92.0	85.9	
			100.6	99.4	100.0	96.3		89.0
	4 AGS2000		105.9	101.7	103.8	101.0	103.8	100.0
	5 S9412192		84.3	86.5	85.4	45.9	98.2	99.6
	6 LA90518PB4		105.0	101.9	103.5	93.3	55.8	50.8
	LA90185G3-1	1-3-4-2	100.0	100.9	100.4	81.2	102.2	97.7
8			96.2	92.9	94.5	82.0	97.9	89.6
ξ.			102.5	100.2	101.4	101.3	75.1	78.6
1			105.8	102.8	104.3	· ·	99.3	100.3
1			98.1	96.9	97.5	107.1	102.9	105.0
1:			95.2	93.7	94.5	95.5	90.4	.93.0
13	the state of the s		103.2	100.1	101.6	89.0	90.0	89.5
14	A CONTRACTOR OF THE CONTRACTOR		93.6	88.9	91.2	105.0	97.0	101.0
15			103.4	101.2		82.3	65.4	73.9
16	AR839-25-8-2		102.6	98.0	102.3	98.6	91.9	95.2
17	AR-LA85411		103.5	101.8	190.3	97.9	87.2	92.5
18	LA9397D5-3-3		102.2	101.6	102.6	96.3	102.1	99.2
19	TX98D2106		90.1		101.9	106.3	102.5	104.4
20	GF90524E1		95.3	91.4	90.8	74.2	81.5	77.8
24	OF92485E15	'A65 2485'	98.4	92.1 97.8	93.7	96.3	91.7	94.0
22			100.8	97.6 95.1	98.1	85.9	89.3	87.6
- 23	NC96-13156	7 (1 ) (2 ) (3 ) (4 ) (4 ) (4 ) (5 ) (4 ) (5 ) (6 ) (6 ) (6 ) (6 ) (6 ) (6 ) (6	102.2	99.9	97.9	90.5	98.7	94.6
24	AW-D97-6075	e Statement - 1964, j	92.7	94.2	101.0	98.3	98.8	98.6
25	AW-D97*6940		101.2		93.4	85.9	99.7	92.8
26	AW-D97*6961		92.8	97.4	99.3	84.4	99.6	92.0
27	AW-D97-6740	in a second	104.8	93.4	<b>9</b> 3.1	91.4	99.8	95.6
28	VA98W-591		99.4	102.9	103.9	93.9	103.5	98.7
29	VA99W-200		101.4	97.8	98.6	98.5	95.7	97.1
30	VA99W-169			103.0	102.2	108.0	101.6	104.8
31	TX97-167		100.3	101.8	101.0	78.2	96.6	87.4
32	SC952746		102.5	103.3	102.9	79.1	95.8	87.5
33	SC960057		95.5	94.0	S4 8	49.7	36.9	43.3
34	B960208	· .	102.2	99.8	101.0	103.3	102.0	102.7
35	B960457		99.8	97.4	98.6	97.3	97.5	97.4
36	B961378		103.8	103.2	103.5	80.9	97.2	89.0
37	G09088		100.2	97.5	98.9	102.0	95.7	98.9
38	G09091	11.4		102.4	101.3	100.4	101.0	100.7
39	G09080		105.7	104.6	105.1	106.4	98.2	102.3
40	G09138		103.2	103.8	103.5	105.4	97.9	101.6
41	F/G921188E43		99.8	100.1	99.9	98.4	99.2	98.8
41 42		,	97.1	95.5	9 <del>6</del> .3	63.4	83.8	73.6
42 43	MDV71-19		102.6	99.4	101.0	84.6	94.0	89.3
40	MDV26-30		93.9	92.8	93.4	77.2	82.3	79.7
-	MINIMUM		84.3	9C F			<u> </u>	13.1
-	MAXIMUM			86.5	85 4	45.9	36.9	43.3
	MEAN		99.7	104.6	105.1	108.0	103.8	105.0
	; ;		JJ. (	98.2	99,0	90,7	92.6	91.7

### **HEADING DATE (Julian)**

		•		
	Blacksbur	g Warsaw	ENTRY ME	ANS
	VA	VA	ALL LOCAT	_
				rank
1 Coker 9835	129	123	116.3	35
2 Coker 9663	128	124	115.0	25
3 Mason	125	121	112.8	5
4 AGS2000	126	121	114.1	14
5 S9412192	127	123	113.6	11
6 LA90518PB43-3-1-4	127	123	113.3	9
7 LA90185G3-1-3-4-2	128	122	114.3	17
8 VA98W-593	127	122	115.3	29
9 NC96-13155	129	125	116.7	39
10 NC96-13965	129	124	118.3	
11 B950943	129	124	116.5	40
12 TX96D1320	129	125	116.4	37
13 TX97D6737	127	124		36
14 TX91-57	124	121	115.0	26
15 AR839-27-1-3	133	126	113.2	8
16 AR839-25-8-2	129	124	119.6	42
17 AR-LA85411	127	the control of the co	116.3	34
18 LA9397D5-3-3	127	123 121	114.5	18
19 TX98D2106	127	the second of th	112.9	7
20 GF90524E1		123	115.8	31
21 GF92485E15 'A65 2485	126 5 126	122	114.6	- 21
22 GF921221E16	. · · · · ·	123	113.7	12
23 NC96-13156	125	119	112.3	4
24 AW-D97-6075	129	124	116.6	38
25 AW-D97*6940	126	121	113.5	10
26 AW-D97*6961	126	121	114.1	13
the state of the s	125	123	115.8	32
27 AW-D97-6740 28 VA98W-591	123	119	111.9	. 2
29 VA99W-200	129	123	115.2	27
	127	119	111.9	3
	127	121	114.7	22
31 TX97-167	128	123	115.3	28
32 SC952746	125	122	114.6	20
33 SC960057	123	123	120.1	43
34 B960208	127	121	114.1	16
35 B960457	129	123	116.2	33
36 B961378	130	125	118.9	41
37 G09088	124	119	112.8	6
38 G09091	125	121	114.1	15
39 G09080	127	121	115.7	30
40 G09138	126 .	122	114.7	23
41 F/G921188E43	128	122	114.5	19
42 MDV71-19	127	122	114.9	24
43 MDV26-30	126	119	111.4	1
LOCATION MEANS	127.0	122.3	•	•

### HEIGHT (inches)

	Prosper TX	Blacksburg VA	Warsaw VA	ENTRY MEANS ALL LOCATIONS
			•	rank
1 Coker 9835	26.7	23	32	30.9 39
2 Coker 9663	32.0	32	37	36.4 3
3 Mason	31.7	25	36	34.7 11
4 AGS2000	28.3	25	33	33.6 21
5 S9412192	28.0	28	34	34.2 15
6 LA90518PB43-3-1-4	28.7	27	32	33.2 25
7 LA90185G3-1-3-4-2	29.3	27	36	34.1 17
8 VA98W-593	27.3	23	31	31.2 37
9 NC96-13155	28.7	23	32	32.1 33
10 NC96-13965	29.0	22	31	31.1 38
11 B950943	30.7	23	34	32.8 28
12 TX96D1320	25.0	21	27	28.1 43
13 TX97D6737	28.7	23	34	31.9 35
14 TX91-57	30.0	25	32	34.2 14
15 AR839-27-1-3	31.3		39	36.0 6
16 AR839-25-8-2	29.0	27	37	34.7 10
17 AR-LA85411	29.0	26	34	33.7 19
18 LA9397D5-3-3	27.7	22	31	30.5 41
19 TX98D2106	31.3	26	32	33.6 23
20 GF90524E1	26.7	21	29	30.1 42
21 GF92485E15 'A65 2485'	31.3	 25	33	33.9 18
22 GF921221E16	31.3	23	35	33.7 20
23 NC96-13156	29.7	24	32	31.9 34
24 AW-D97-6075	29.7	24	34	32.9 27
25 AW-D97*6940	30.7	26	33	33.6 22
26 AW-D97*6961	29.7	25	33	32.5 31
27 AW-D97-6740	30.3		33	32.8 29
28 VA98W-591	26.7	24	30	30.9 40
29 VA99W-200	27.7	25	32	32.3 32
30 VA99W-169	29.3	26	33	33.0 26
31 TX97-167	29.3	30	35	34.8 9
32 SC952746	30.3	31	38	37.6 1
33 SC960057	35.7	25	34	35.7 8
34 B960208	30.0	23	34	34.3 13
35 B960457	31.7	30	36	35.7 7
36 B961378	31.3	27	32	32.6 30
37 G09088	35.0 ··.	31	38	36.3
38 G09091	33.7	29	37	36.1
39 G09080	33.7	31 · · · · · · · · · · · · · · · · · · ·	37	36.6
40 G09138	33.0	30	35	34.4 12
41 F/G921188E43	32.0	30	34	34.1 16
42 MDV71-19	25.7	25	32	31.3 36
43 MDV26-30	<b>33</b> .0	24	37	33.5 24
40 1410 4 20-00		<b>4.</b> 7	<b>3</b> 7	JJ.J 24
LOCATION MEANS	30.0	25.9	33.7	

11/20/02

REPRODUCE LOCALLY Include form no	HILLER BUILD BESTREE	n date on ail :	teproductions'	医内皮肤 医皮皮皮 医外层孔	- OMB No. 0581-	TARK .
U.S. DEPARTMENT OF AC AGRICULTURAL MARKETI	RICULTURE	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Application is required in order to de		Contraction of the Contraction o	ಀಀಀೱ
			certificate is to be issued (7 U.S.C. 2	421). The Informat	ion is held	
EXHIBIT E STATEMENT OF THE BASIS	OF OWNER		confidential until the certificate is issu	ued (7 U.S.C. 2426	),	1.4
1, NAME OF APPLICANT(S) Univer			2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NA	ME	
Research Foundation, Inc Agricultural Experiment :		rida	GA92485E15	_AC\$485	'A65 2485	- 11 ha
4. ADDRESS (Street and No. or R.F.D. No., City.	control of the second	Country)	5: TELEPHONE (Include area code)	6. FAX //schele are	And the second	minterromany.
Boyd Graduate Studies Research Center 6th Floor		706-542-5944	706-542-			
			700-342	3037	Walter W	
D::Ws: Brooks Drive			7. RYPO NUMBER 20	<b>A7</b>	a e	
Athens, GA 30602-7422  8. Does the applicant own all rights to the	variety? Mark	an "Y" in the	appropriate block. If no please and	03000	05	
o. Does the applicant own all rights to the	a vanety? Mark	an "X" in the	appropriate block. If no, please exp	lain X	YES	
9. Is the applicant (individual or company	) a U.S. Nationa	al or a U.S. ba	ased company? If no, give name of	country X	YES N	0
				حب	لسبسا	
10. Is the applicant the original owner?	y YES	l NO	If no, please answer one of the fo	41		
	X .20		ii iio, piease aliswer <u>one</u> of the fo	nowing:	a de la companya de l La companya de la co	
a. If the original rights to variety were	owned by indiv	/idual(s), is (a	are) the original owner(s) a U.S. Nation	ıal(s)?		
	┌─┐ YES	☐ NO	If no, give name of country		•	
			., <b>3</b>			
b. If the original rights to variety were	owned by a co	ompany(ies),	is (are) the original owner(s) a U.S. ba	ised company?		
	YES	☐ NO	If no, give name of country			
	Ш		•			
11 Additional explanation on ownership	If needed was	the servers of		· · · · · · · · · · · · · · · · · · ·		
11. Additional explanation on ownership (	if needed, use i	the reverse fo	or extra space):	· · · · · · · · · · · · · · · · · · ·		<del></del>
(	lf needed, use i	the reverse fo	or extra space):	·		·
1. Additional explanation on ownership (	lf needed, use i	the reverse fo	or extra space):	· · · · · · · · · · · · · · · · · · ·		· ·
(	If needed, use i	the reverse fo	or extra space):			·.
(	if needed, use i	the reverse fo	or extra space):	· · · · · · · · · · · · · · · · · · ·		
See attached	If needed, use t	the reverse fo	or extra space):			
See attached		- · ·				
See attached  LEASE NOTE:  lant variety protection can only be afford	ed to the owner	's (not license	ees) who meet the following criteria:			
See attached  PLEASE NOTE:  Plant variety protection can only be afford	ed to the owner	's (not license	ees) who meet the following criteria:	of a UPOV membe	er country, or	
See attached  PLEASE NOTE:  Plant variety protection can only be afforded.  If the rights to the variety are owned by national of a country which affords simil	ed to the owner the original bre ar protection to	s (not license eder, that per nationals of thick employe	ees) who meet the following criteria: rson must be a U.S. national, national the U.S. for the same genus and spec	ies.		
See attached  PLEASE NOTE:  Plant variety protection can only be afford.  If the rights to the variety are owned by national of a country which affords simil.  If the rights to the variety are owned by nationals of a UPOV member country, or genus and species.	ed to the owner the original bre ar protection to the company w or owned by nat	s (not license eder, that per nationals of thich employe ionals of a co	nees) who meet the following criteria:  rson must be a U.S. national, national the U.S. for the same genus and spected the original breeder(s), the companyountry which affords similar protection	ies. y must be U.S. bas to nationals of the	ed, owned by U.S. for the same	
PLEASE NOTE:  Plant variety protection can only be afforded.  If the rights to the variety are owned by national of a country which affords similarly. If the rights to the variety are owned by nationals of a UPOV member country, or	ed to the owner the original bre ar protection to the company w or owned by nat ne original owne	s (not license eder, that per nationals of the chich employed tionals of a co	ees) who meet the following criteria: rson must be a U.S. national, national the U.S. for the same genus and spec ed the original breeder(s), the compan- buntry which affords similar protection riginal owner and the applicant must re	ies.  y must be U.S. bas  to nationals of the  neet one of the abo	ed, owned by U.S. for the same	-n

response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14<sup>th</sup> and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

## Exhibit E 11. Additional Explanation of Ownership

-GA92485E15 'A65 2485'

MAH ' 11-20-02

The variety for which plant variety protection is hereby sought is owned jointly by the University of Georgia Research Foundation, Inc. (UGARF) and the Florida Agricultural Experiment Stations, University of Florida (FAES).

Ownership by UGARF in the variety for which plant variety protection is hereby sought is based on the Invention Administration Agreement of April 1, 1979, which was superseded by the Intellectual Property Administration Agreement of November 8, 1995, between UGARF and the Board of Regents of the University System of Georgia, in which the Board of Regents assigned to UGARF all rights in intellectual property developed or created by employees at The University of Georgia, one of the universities of the University System of Georgia. Rights of novel plant varieties developed at The University of Georgia, including GA92485E15, are covered by said Administration Agreement. As employees of The University of Georgia, Jerry W. Johnson, Barry Cunfer, and G. David Buntin have assigned their rights in GA92485E15 to UGARF.

Ron Barnett and Paul Pfahler are employees of the Florida Agricultural Experiment Stations, the University of Florida.